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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,841	01/31/2001	Christos Karamanolis	10008124-1	6264

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HEWLETT PACKARD COMPANY
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FORT COLLINS, CO 80527-2400

EXAMINER

BOUTAH, ALINA A

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/774,841

Applicant(s)

KARAMANOLIS ET AL.

Examiner

Alina N Boutah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,212,640 issued to Abdelnur et al. (hereby Abdelnur).

Regarding claim 1, Abdelnur teaches a file interface arrangement for providing remote file access to a data processing system via a network, the data processing system including a system input/output bus, the file interface arrangement comprising:

a bus-interface circuit arranged to interface with the system input/output bus (figure 7: 718);

a processor arrangement coupled to the bus-interface circuit (figure 7: 713);

a memory coupled to the processor arrangement, the memory configured with program code that is executable by the processor arrangement and that implements a standard NFS client protocol, at least one non-standard extension to the NFS client protocol, and a network protocol stack (figure 7: 715); and

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a network-interface circuit arrangement coupled to the processor arrangement and arranged to send data received from the processor over the network and receive data via the network (figure 7: 720).

Regarding claim 2, Abdelnur teaches the arrangement of claim 1, wherein the data processing system includes an operating system and hosts an NFS client application, the arrangement further comprising an interceptor module coupled to the operating system and to the system bus, the interceptor module configured and arranged to intercept NFS-client calls from the NFS client application and send NFS-client calls to the processor arrangement via the system bus (figure 2; col. 6, lines 22-59).

Regarding claim 3, Abdelnur teaches the arrangement of claim 2, wherein the operating system includes a message stream and the interceptor module is configured and arranged to intercept NFS messages from a message stream of the operating system (figure 2; col. 6, lines 22-59).

Regarding claim 4, Abdelnur teaches the interface arrangement of claim 3, wherein at least one non-standard extension to the NFS client protocol includes an interface to one or more of a storage area network, a database system, a name server, or a meta-data server (figure 7).

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Regarding claim 5, Abdelnur teaches the arrangement of claim 2, wherein the operating system includes an RPC software layer, and the interceptor module is configured and arranged to intercept packets from the RPC layer of the operating system (col. 6, lines 40-59).

Regarding claim 6, Abdelnur teaches the interface arrangement of claim 5, wherein at least one non-standard extension to the NFS client protocol includes an interface to one or more of a storage area network, a database system, a name server, or a meta-data server (figures 2 and 7).

Regarding claim 7, Abdelnur teaches the interface arrangement of claim 4, wherein at least one non-standard extension to the NFS client protocol includes an interface to one or more of a storage area network, a database system, a name server, or a meta-data server (figures 2 and 7).

Regarding claim 8, Abdelnur teaches a method for processing network file system (NFS) client calls on a client data processing system, the client system including a processor arrangement that hosts an operating system and a client application, a first network interface card, and a second network interface card, the client application making NFS client calls consistent with an NFS client protocol, comprising:

intercepting an NFS-client call from the client application on the processor arrangement (figure 2; col. 6, lines 22-59);

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sending intercepted NFS-client calls to the first network interface card (figure 2; col. 6, lines 22-59);

performing NFS-client protocol processing on the first network interface card in response to the NFS-client calls (figure 2; col. 6, lines 22-59);

sending non-NFS RPCs to the second network interface card (figure 2; col. 6, lines 22-59); and

performing non-NFS RPC protocol processing on the second network interface card (figure 2; col. 6, lines 22-59).

Regarding claim 9, Abdelnur teaches the method of claim 8, further comprising performing on the first network interface card a process that implements one or more extensions to the NFS client protocol (figure 2; col. 6, lines 22-59).

Regarding claim 10, Abdelnur teaches the method of claim 9, wherein the one or more extensions include an interface to one or more of a storage area network, a database system, a name server, or a meta- data server (figure 2; col. 6, lines 22-59).

Regarding claim 11, Abdelnur teaches the method of claim 10, further comprising intercepting NFS messages from a message stream of the operating system (figure 2; col. 6, lines 22-59).

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Regarding claim 12, Abdelnur teaches the method of claim 10, wherein the operating system includes an RPC software layer, and further comprising intercepting packets from the RPC layer of the operating system (figure 2; col. 6, lines 22-59).

Regarding claim 13, Abdelnur teaches the method of claim 8, further comprising intercepting NFS messages from a message stream of the operating system (figure 2; col. 6, lines 22-59).

Regarding claim 14, Abdelnur teaches the method of claim 8, wherein the operating system includes an RPC software layer, and further comprising intercepting packets from the RPC layer of the operating system (figure 2; col. 6, lines 22-59).

Regarding claim 15, Abdelnur teaches an apparatus for processing network file system (NFS) client calls on a client data processing system, the client system including a processor arrangement that hosts an operating system and a client application, a first network interface card, and a second network interface card, the client application making NFS client calls consistent with an NFS client protocol, comprising:

means for intercepting an NFS-client call from the client application on the processor arrangement (figure 2; col. 6, lines 22-59);

means for sending intercepted NFS-client calls to the first network interface card (figure 2; col. 6, lines 22-59);

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means for performing NFS-client protocol processing on the first network interface card in response to the NFS-client calls (figure 2; col. 6, lines 22-59);

means for sending non-NFS RPCs to the second network interface card (figure 2; col. 6, lines 22-59); and

means for performing non-NFS RPC protocol processing on the second network interface card (figure 2; col. 6, lines 22-59).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. USPAP 2001/0032320 by Abdelnur et al.
2. USPN 6,185,615 issued to Labiaga et al.
3. USPN 5,613,155 issued to Baldiga et al.
4. USPAP 2002/0083111 by Row et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alina N Boutah whose telephone number is (703) 305-5104. The examiner can normally be reached on Monday-Thursday (9:00 am-7:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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DAVID WILEY
SUPERVISORY PATENT EXAMINER
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